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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 18:45:13 ON 07 JUL 2005

=> file biosis medline caplus wpids  uspatfull
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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s dimer? (4a) (dye? or label?)
L1        2621 DIMER? (4A) (DYE? OR LABEL?)

=> s l1 and phenanthridium
L2          13 L1 AND PHENANTHRIDIUM

=> s l1 and phenanthridinium
L3          17 L1 AND PHENANTHRIDINIUM

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4           17 DUP REM L3 (0 DUPLICATES REMOVED)

=> s l4 and link?
L5          17 L4 AND LINK?

=> d l5 bib abs 1-17

L5   ANSWER 1 OF 17  USPATFULL on STN
AN     2005:159178  USPATFULL
TI     Real-time nucleic acid detection processes and compositions
IN     Rabbani, Elazar, New York, NY, UNITED STATES
       Stavrianopoulos, Jannis G., Baysnore, NY, UNITED STATES
       Donegan, James J., Long Beach, NY, UNITED STATES
       Coleman, Jack, East Northport, NY, UNITED STATES
       Liu, Dakai, Islip, NY, UNITED STATES
PI     US 2005137388      A1   20050623
AI     US 2002-96076      A1   20020312 (10)
DT     Utility
FS     APPLICATION
LREP   ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022,
       US
CLMN   Number of Claims: 542
ECL    Exemplary Claim: 1
DRWN   15 Drawing Page(s)
LN.CNT 6158
AB     This invention provides for compositions for use in real time nucleic
       acid detection processes. Such real time nucleic acid detection
       processes are carried out with energy transfer elements attached to
       nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid
       binding agents. Real time nucleic acid detection allows for the
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10/764,389

qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

L5 ANSWER 2 OF 17 USPATFULL on STN
AN 2005:49898 USPATFULL
TI Detection of protein conformations in single cells
IN Darzynkiewicz, Zbigniew, Chappague, NY, UNITED STATES
Traganos, Frank, New York, NY, UNITED STATES
Juan, Gloria, Sleepy Hollow, NY, UNITED STATES
Gruenwald, Stefan, Encinitas, CA, UNITED STATES
PI US 2005042694 A1 20050224
AI US 2004-954097 A1 20040929 (10)
RLI Continuation of Ser. No. US 1999-256817, filed on 24 Feb 1999, GRANTED, Pat. No. US 6821740
PRAI US 1998-75908P 19980225 (60)
DT Utility
FS APPLICATION
LREP DAVID W. HIGHET, VP AND CHIEF IP COUNSEL, BECTON, DICKINSON AND COMPANY, 1 BECTON DRIVE, MC 110, FRANKLIN LAKES, NJ, 07417-1880
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2371
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, reagents, and kits are provided that permit flow cytometric determination of the phosphorylation status of retinoblastoma susceptibility gene protein (pRB) in individual cells. Methods are described that permit the hypophosphorylated, active, form of pRB to be measured either as an absolute quantity or as a proportion of total cellular pRB. Further described are methods that permit pRB phosphorylation status to be correlated with cell cycle phase and with protein components of the cell cycle. Screening of chemical compounds for antiproliferative and antineoplastic activity using the flow cytometric assays is demonstrated. Reagent kits that facilitate the subject methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 17 USPATFULL on STN
AN 2005:5243 USPATFULL
TI Novel chemiluminescent reagents
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2005004350 A1 20050106
AI US 2004-764388 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 17
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3601
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays.

They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 17 USPATFULL on STN
AN 2004:321700 USPATFULL
TI Labeling reagents comprising aphenylic analogs of rhodamine dyes
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY (U.S. corporation)
PI US 2004254355 A1 20041216
AI US 2004-763076 A1 20040122 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4545
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 17 USPATFULL on STN
AN 2004:292946 USPATFULL
TI Heterodimeric dye composition
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabban, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES, 10022 (U.S. corporation)
PI US 2004230036 A1 20041118
AI US 2004-764389 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 17 USPATFULL on STN
AN 2004:292164 USPATFULL
TI Novel dye labeling composition
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2004229248 A1 20041118

AI US 2004-764393 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue, 9th Floor, New York, NY, 10022-4304
CLMN Number of Claims: 4
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3537
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 17 USPATFULL on STN
AN 2004:260541 USPATFULL
TI Process for preparing novel cyanine dye labeling reagents
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbam, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2004203038 A1 20041014
AI US 2004-761906 A1 20040121 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 15
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3584
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 17 USPATFULL on STN
AN 2004:248291 USPATFULL
TI Process for detecting the presence or quantity of enzymatic activity in a sample
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES, 10022 (U.S. corporation)
PI US 2004192893 A1 20040930
AI US 2004-764417 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 36
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3665

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 17 USPATFULL on STN
AN 2004:228200 USPATFULL
TI Process for detecting the presence or quantity of enzymatic activity in a sample
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2004176586 A1 20040909
AI US 2004-764418 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 17 USPATFULL on STN
AN 2004:44526 USPATFULL
TI Characterization of single stranded nucleic acids by melting analysis of secondary structure using double strand-specific nucleic acid dye
IN Wittwer, Carl T., Salt Lake City, UT, UNITED STATES
Dummer, C. Wade, Layton, UT, UNITED STATES
PI US 2004033518 A1 20040219
AI US 2003-423621 A1 20030425 (10)
PRAI US 2002-375640P 20020426 (60)
DT Utility
FS APPLICATION
LREP Richard F. Trecartin, DORSEY & WHITNEY LLP, Suite 3400, Four Embarcadero Center, San Francisco, CA, 94111-4187
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 2218
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel method for characterizing nucleic acids. A nucleic acid is combined with a double stranded nucleic acid-specific dye to form a detectable complex between the dye and one or more double stranded structures within the nucleic acid. The combination is then exposed to varying temperatures and the fluorescence emission of the dye is measured to determine the melting temperature(s) for the double stranded structures. In some embodiments that melting temperature profile is then compared to melting temperature profiles generated for other nucleic acid(s) to discern differences between the compared nucleic acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 17 USPATFULL on STN
AN 2003:319498 USPATFULL
TI Labeling reagents and labeled targets, target labeling processes and other processes for using same in nucleic acid determinations and analyses
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PI US 2003225247 A1 20031204
AI US 2002-96075 A1 20020312 (10)
DT Utility
FS APPLICATION
LREP ENZO LIFE SCIENCES, INC., c/o ENZO BIOCHEM, INC., 527 Madison Avenue, 9th Floor, New York, NY, 10022
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 17 USPATFULL on STN
AN 2003:159339 USPATFULL
TI FLOW CYTOMETRIC METHODS FOR THE CONCURRENT DETECTION OF DISCRETE FUNCTIONAL CONFORMATIONS OF PRB IN SINGLE CELLS
IN DARZYNKIEWICZ, ZBIGNIEW, CHAPPAQUE, NY, UNITED STATES
TRAGANOS, FRANK, NEW YORK, NY, UNITED STATES
JUAN, GLORIA, SLEEPY HOLLOW, NY, UNITED STATES
GRUENWALD, STEFAN, ENCINITAS, CA, UNITED STATES
PI US 2003108952 A1 20030612
US 6821740 B2 20041123
AI US 1999-256817 A1 19990224 (9)
PRAI US 1998-75908P 19980225 (60)
DT Utility
FS APPLICATION
LREP SCHNECK & SCHNECK, P.O. BOX 2-E, SAN JOSE, CA, 95109-0005
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN 16 Drawing Page(s)
LN.CNT 2308
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods, reagents, and kits are provided that permit flow cytometric determination of the phosphorylation status of retinoblastoma susceptibility gene protein (pRB) in individual cells. Methods are described that permit the hypophosphorylated, active, form of pRB to be measured either as an absolute quantity or as a proportion of total cellular pRB. Further described are methods that permit pRB phosphorylation status to be correlated with cell cycle phase and with protein components of the cell cycle. Screening of chemical compounds for antiproliferative and antineoplastic activity using the flow cytometric assays is demonstrated. Reagent kits that facilitate the subject methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 17 USPATFULL on STN
AN 2002:194455 USPATFULL
TI Multichromophore fluorescent probes using DNA intercalation complexes
IN Glazer, Alexander N., Orinda, CA, United States

Mathies, Richard A., El Cerrito, CA, United States
Peck, Konan, Taipei, TAIWAN, PROVINCE OF CHINA
PA The Regents of the University of California, Berkeley, Berkeley, CA, United States (U.S. corporation)
PI US 6428667 B1 20020806
AI US 2000-686147 20001010 (9)
RLI Division of Ser. No. US 1997-966398, filed on 7 Nov 1997, now patented, Pat. No. US 6280933 Continuation of Ser. No. US 1993-161231, filed on 2 Dec 1993, now patented, Pat. No. US 5763162 Continuation of Ser. No. US 1992-831823, filed on 6 Feb 1992, now abandoned Continuation-in-part of Ser. No. US 1990-493307, filed on 14 Mar 1990, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Whisenant, Ethan C.; Assistant Examiner: Lu, Frank
LREP Field, Bret E., Bozicevic, Field & Francis
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 715
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel fluorescent labeling techniques and fluorescent labels are provided, employing high affinity non-covalently binding and intercalating fluorescent dyes and dsDNA. The dyes find application to provide highly sensitive labeling of nucleic acids in electrophoretic gels and as pre-prepared labels for binding to a wide variety of specific binding pair members. The DNA-dye fluorescer complex can be used for labels in diagnostic assays, detection of specific nucleic acid sequences, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 17 USPATFULL on STN
AN 2002:69763 USPATFULL
TI Stabilization of highly sensitive nucleic acid stains in aqueous solutions
IN Wu, Minjie, Thomaston, ME, United States
White, Hugh W., Camden, ME, United States
Kusukawa, Noriko, Salt Lake City, UT, United States
Stein, Thomas M., Myersville, MD, United States
PA BioWhittaker Molecular Applications, Inc., Rockland, ME, United States (U.S. corporation)
PI US 6365341 B1 20020402
AI US 2000-535129 20000324 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Leary, Louise N.
LREP Ratner & Prestia
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 358
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention discloses the use of quaternary compounds as stabilizing agents for highly-sensitive fluorescent nucleic acid stains in aqueous solvents, their use in gels to give increased usable shelf life, and in compositions of solvents, providing ready-to-use stain solutions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 17 USPATFULL on STN
AN 2001:215176 USPATFULL
TI Quenching oligonucleotides
IN Singer, Victoria L., Eugene, OR, United States
Haugland, Richard P., Eugene, OR, United States
PA Molecular Probes, Inc., Eugene, OR, United States (U.S. corporation)
PI US 6323337 B1 20011127
AI US 2000-570343 20000512 (9)

PRAI US 1999-131782P 19990430 (60)
US 1999-131782P 19990403 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Helfenstein, Allegra J., Skaugset, Anton E.
CLMN Number of Claims: 64
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 1911
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to oligonucleotides labeled with an energy transfer acceptor useful in conjunction with fluorescent nucleic acid stains. The resulting oligonucleotides are useful for decreasing background fluorescence during amplification assays and in ligation assays, and for detecting hybridization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 17 USPATFULL on STN
AN 2001:142076 USPATFULL
TI Multichromophore fluorescent probes using DNA intercalation complexes
IN Glazer, Alexander N., Orinda, CA, United States
Mathies, Richard A., El Cerrito, CA, United States
Peck, Konan, Taipei, Taiwan, Province of China
PA The Regents of the University of California, Berkeley, CA, United States (U.S. corporation)
PI US 6280933 B1 20010828
AI US 1997-966398 19971107 (8)
RLI Continuation of Ser. No. US 1993-161231, filed on 2 Dec 1993 Continuation of Ser. No. US 1992-831823, filed on 6 Dec 1992, now abandoned Continuation of Ser. No. US 1990-493307, filed on 14 Mar 1990, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Field, Bret E.Bozicevic, Field & Francis
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 749
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel fluorescent labeling techniques and fluorescent labels are provided, employing high affinity non-covalently binding and intercalating fluorescent dyes and dsDNA. The dyes find application to provide highly sensitive labeling of nucleic acids in electrophoretic gels and as pre-prepared labels for binding to a wide variety of specific binding pair members. The DNA-dye fluorescer complex can be used for labels in diagnostic assays, detection of specific nucleic acid sequences, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 17 USPATFULL on STN
AN 1998:64954 USPATFULL
TI Multichromophore fluorescent DNA intercalation complexes
IN Glazer, Alexander N., Orinda, CA, United States
Mathies, Richard A., El Cerrito, CA, United States
Peck, Konan, Taipei, Taiwan, Province of China
PA The Regents of University of California, Berkeley, CA, United States (U.S. corporation)
PI US 5763162 19980609
AI US 1993-161231 19931202 (8)
RLI Continuation of Ser. No. US 1992-831823, filed on 6 Feb 1992, now abandoned which is a continuation-in-part of Ser. No. US 1990-493307, filed on 14 Mar 1990, now abandoned
DT Utility
FS Granted

EXNAM Primary Examiner: Campbell, Eggerton A.
LREP Field, BretBozicevic & Reed LLP
CLMN. Number of Claims: 2
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 672
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel fluorescent labeling techniques and fluorescent labels are provided, employing high affinity non-covalently binding and intercalating fluorescent dyes and dsDNA. The dyes find application to provide highly sensitive labeling of nucleic acids in electrophoretic gels and as pre-prepared labels for binding to a wide variety of specific binding pair members. The DNA-dye fluorescer complex can be used for labels in diagnostic assays, detection of specific nucleic acid sequences, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

```
=> s heterodimer? (4a) dye?
L6          103 HETERODIMER? (4A) DYE?

=> s l6 not l5
L7           91 L6 NOT L5

=> s l7 and phenanthridinium
L8            7 L7 AND PHENANTHRIDINIUM

=> dup rem l8
PROCESSING COMPLETED FOR L8
L9            5 DUP REM L8 (2 DUPLICATES REMOVED)

=> d l9 bib abs 1-5

L9   ANSWER 1 OF 5  USPATFULL on STN
AN     2004:327308  USPATFULL
TI     Methods and compositions for detecting the presence of target nucleic
       acids in a sample
IN     Kawasaki, Glenn, Seattle, WA, UNITED STATES
       Travis, Bruce M., Seattle, WA, UNITED STATES
PI     US 2004259128      A1   20041223
AI     US 2004-799925     A1   20040311 (10)
PRAI   US 2003-532699P     20031224 (60)
       US 2003-457527P     20030324 (60)
DT     Utility
FS     APPLICATION
LREP   BOZICEVIC, FIELD & FRANCIS LLP, 1900 UNIVERSITY AVE, SUITE 200, EAST
       PALO ALTO, CA, 94303
CLMN   Number of Claims: 31
ECL    Exemplary Claim: 1
DRWN   3 Drawing Page(s)
LN.CNT 1585
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Methods and compositions for detecting the presence, e.g.,
       quantitatively, of a target nucleic acid, such as an siRNA, in a sample
       are provided. In the subject methods, a sample is contacted with at
       least two different ligation domains, which may be present on separate
       nucleic acids (e.g., oligonucleotides) or on the same complex, e.g.,
       Combined Oligo, to produce a reaction mixture, where each of the
       different ligation domains includes a domain complementary to a
       different region of the target nucleic acid. The ligation domains of any
       resultant ligation domain/target nucleic acid complexes are then ligated
       to produce a pseudotarget nucleic acid. The presence of any resultant
       pseudotarget nucleic acids in the reaction mixture is then determined in
       order to detect the target nucleic acid in the sample. Also provided are
       systems and kits that find use in practicing the subject methods. The
       subject invention finds use in a variety of applications, including
       therapeutic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9   ANSWER 2 OF 5  USPATFULL on STN
AN     2004:227318  USPATFULL
TI     Compositions and methods for polynucleotide sequence detection
IN     Sorge, Joseph A., Wilson, WY, UNITED STATES
       Firmin, Andrew, Jackson, WY, UNITED STATES
PA     Stratagene (U.S. corporation)
PI     US 2004175704      A1   20040909
AI     US 2003-436231     A1   20030512 (10)
PRAI   US 2003-452481P     20030306 (60)
DT     Utility
FS     APPLICATION
LREP   PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS / STR, 111 HUNTINGTON AVENUE,
       BOSTON, MA, 02199
CLMN   Number of Claims: 61
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ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 2931
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides compositions, kits, and methods for detecting polynucleotide sequence differences. The method involves amplifying a polynucleotide in the presence of a labeled nucleotide whose incorporation into the amplified product can indicate the presence of a sequence difference within the polynucleotide template. The invention is particularly useful for differentiating two or more closely related polynucleotide sequences, for example, in determining which allele or alleles of a multiallelic organism are present in a target polynucleotide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 5 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2004-055097 [06] WPIDS
DNN N2004-044609 DNC C2004-022436
TI Labeling reagent useful for e.g. determining the amount of nucleic acid in a sample comprises a marker moiety and a reactive group covalently linked together.
DC B04 D16 E24 S03
IN RABBANI, E; STAVRIANOPOULOS, J G; RABBAM, E; RABBAN, E
PA (ENZO-N) ENZO LIFE SCI INC; (RABB-I) RABBANI E; (STAV-I) STAVRIANOPOULOS J G
CYC 34
PI EP 1348713 A2 20031001 (200406)* EN 102
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
CA 2421552 A1 20030912 (200406) EN
JP 2004004048 A 20040108 (200406) 245
US 2003225247 A1 20031204 (200406)
US 2004176586 A1 20040909 (200459)
US 2004192893 A1 20040930 (200465)
US 2004203038 A1 20041014 (200468)
US 2004229248 A1 20041118 (200477)
US 2004230036 A1 20041118 (200477)
US 2004254355 A1 20041216 (200482)
US 2005004350 A1 20050106 (200504)
ADT EP 1348713 A2 EP 2003-4894 20030306; CA 2421552 A1 CA 2003-2421552 20030311; JP 2004004048 A JP 2003-114988 20030311; US 2003225247 A1 US 2002-96075 20020312; US 2004176586 A1 Div ex US 2002-96075 20020312, US 2004-764418 20040123; US 2004192893 A1 Div ex US 2002-96075 20020312, US 2004-764417 20040123; US 2004203038 A1 Div ex US 2002-96075 20020312, US 2004-761906 20040121; US 2004229248 A1 Div ex US 2002-96075 20020312, US 2004-764393 20040123; US 2004230036 A1 Div ex US 2002-96075 20020312, US 2004-764389 20040123; US 2004254355 A1 Div ex US 2002-96075 20020312, US 2004-763076 20040122; US 2005004350 A1 Div ex US 2002-96075 20020312, US 2004-764388 20040123
PRAI US 2002-96075 20020312; US 2004-764418 20040123;
US 2004-764417 20040123; US 2004-761906 20040121;
US 2004-764393 20040123; US 2004-764389 20040123;
US 2004-763076 20040122; US 2004-764388 20040123
AN 2004-055097 [06] WPIDS
AB EP 1348713 A UPAB: 20040123
NOVELTY - A labeling reagent (XII) comprises a marker moiety and a reactive group covalently linked together.
DETAILED DESCRIPTION - A labeling reagent of formula (MR) (XII) comprises a marker moiety and a reactive group covalently linked together.
M = marker moiety comprising ligand and/or dye; and
R = reactive group capable of forming a carbon-carbon linkage with the target.
INDEPENDENT CLAIMS are included for the following:
(a) a labeled target, labeled by reacting target with (XII) to form a carbon-carbon linkage between the target and (XII);
(b) preparation of cyanine dye labeling reagent of formula (I) involving forming a mixture comprising intermediate compounds of formulae

(Ia) and (Ib), and linking reagents to link (Ia) and (Ib);

(c) a labeled nucleotide comprising an aphenylic analog of a rhodamine dye, which is attached directly to the nucleotide or indirectly through a linker;

(d) a **heterodimeric dye** composition (C1) comprising a dye (a) containing a **phenanthridinium** moiety and another dye (b) different from (a) and attached through the phenyl ring of the **phenanthridinium** moiety;

(e) determining the amount of nucleic acid in a sample involving:

(1) forming a mixture of the sample (a dye comprising two **phenanthridinium** moieties linked through a phenyl group in each of the two moieties, or a dye of formula (IV), or (C1) and reagents for carrying out dye binding, hybridization and/or strand extension) to produce a complex comprising the dye and any nucleic acid present in the sample;

(2) illuminating the mixture formed at wavelength below 400 nanometer (nm); and

(3) measuring fluorescent emission from the illuminated mixture, the emission being proportional to the quantity of the nucleic acid present in the sample;

(f) a composition comprising at least one of (IV);

(g) a chemiluminescent reagent of formula (VIII) or (IX);

(h) detecting the presence or quantity of enzymatic activity in a sample involving:

(1) either forming a mixture of the sample, (VIII) or (IX) and reagents and buffers for carrying out chemiluminescent reactions or contacting (VIII) or (IX) and the reagents and buffers with the sample;

(2) enzymatically converting (VIII) or (IX) into an unstable light-emitting dioxetane form; and

(3) measuring the quantity of light generated by the enzymatic conversion; and

(i) a dye composition comprising a compound of formula Rc-Fluorescent Dye.

at least one of R1-R10 = group capable of forming a carbon to carbon bond with a target;

X1, X2 = C, O, N or S;

n = 1-3;

Y = piperidin-1-yl, -NH-(CH2)2-NH-(CH2)2-NH2, N+((CH2)2)-CH2CH2-N+((CH2)2) or N,N-diethyl-N-methylammonium;

Q = (poly)cycloalkyl;

Z = H, aralkyl, alkaryl, (hetero)alkyl, (hetero)aryl, cycloalkyl or cycloheteroalkyl;

R1a and R2a = chemical moieties;

A = cyclic ring;

Ra = chemical linker;

Rb = substrate for non-cleaving enzymatic process;

Rc = unsaturated aliphatic groups, unsaturated heterocyclic groups and/or aromatic groups.

R1a is enzymatically converted into R1b, which comprises a chemical reactive group G1. R2a is attached to the cyclic ring through an oxygen atom and comprises a chemical reactive group G2, which reacts with the G1 to convert the dioxetane to an unstable light-emitting dioxetane form. The product of enzymatic process leads to further chemical rearrangement that generate an unstable light emitting dioxetane form. Rc is capable of providing a conjugated system or an electron delocalized system with the fluorescent dye.

USE - For labeling a target; for determining the amount of nucleic acid in a sample; and for detecting the presence or quantity of enzymatic activity in a sample (claimed); and in protein and nucleic acid probe based assays.

Dwg.0/15

L9 ANSWER 4 OF 5 USPATFULL on STN

AN 2003:129915 USPATFULL

TI Method for overcoming bacterial antibiotic resistance

IN Shapiro, Howard M., 283 Highland Ave., West Newton, MA, United States 02465-2513

PA Shapiro, Howard M., West Newton, MA, United States (U.S. individual)

PI US 6562785 B1 20030513
AI US 1999-274699 19990323 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Low, Christopher S. F.; Assistant Examiner: Mohamed, Abdel A.
LREP Hamilton, Brook, Smith & Reynolds, P.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 898
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is drawn to methods of killing bacteria, including antibiotic resistant bacteria, by contacting said bacteria with a membrane permeabilizing compound or combination of compounds and a membrane impermeant toxic agent or combination of agents, resulting in the death of the bacteria without substantial injury to the infected host or patient. The present invention is also drawn to compositions and kits for effecting the method of the present invention. The present invention is further drawn to methods of rendering toxic agents such as toxic organic molecules, membrane impermeant for use in the methods and compositions of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 1
AN 1994:109442 BIOSIS
DN PREV199497122442
TI **Heterodimeric** DNA-binding **dyes** designed for energy transfer: Stability and applications of the DNA complexes.
AU Benson, Scott C.; Mathies, Richard A.; Glazer, Alexander N. [Reprint author]
CS Dep. Molecular Cell Biology, 229 Stanley Hall, Univ. Calif., Berkeley, CA 94720, USA
SO Nucleic Acids Research, (1993) Vol. 21, No. 24, pp. 5720-5726.
CODEN: NARHAD. ISSN: 0305-1048.
DT Article
LA English
ED Entered STN: 14 Mar 1994
Last Updated on STN: 14 Mar 1994
AB Spectroscopic studies of the complexes of double-stranded (ds) DNA with the polymethylene-amine linked heterodimers thiazole orange-thiazole blue, thiazole orange - ethidium, and fluorescein - ethidium, in each case show efficient energy transfer from donor to acceptor chromophores (Benson, S.C., Singh, P. and Glazer, A.N. (1993) accompanying manuscript). A quantitative assay of the stability of such complexes during gel electrophoresis is presented. The off-rate of dye from complexes formed at an initial dsDNA bp:dye ratio gtoreq 10:1 follows strict first-order kinetics. The t-0.5 values for the dissociation of a series of related dyes provide a quantitative criterion for the design of DNA-binding fluorophores. Complexes of dsDNA with the monomeric propidium and cyanine dyes, (1-(9-amino-4,7-diazanonyl)-3,8-diamino-6-phenyl-**phenanthridinium** bromide trihydrobromide) and (N,N'-tetramethyl-1,3-propanediamino)propyl thiazole orange (4-(3-methyl-2,3-dihydro-(benzo-1,3-thiazole)-2-methylidenyl)-1-(4,4,8-trimethyl-4,8-diazanonyl)-quinolinium diiodide), are much more stable than those with their widely used counterparts, ethidium and thiazole orange. Applications of the new dyes in post-staining of gels and in the multiplex detection of DNA restriction fragments are presented.

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